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DUXBURY GROWTH MAY DEPEND ON WATER SUPPLY

The future growth of Duxbury may not depend on a protective by-law, but rather on its water supply. Contrary to the belief of many, Duxbury's water supply is not infinite. These points were emphasized by Jim Spinale, a member of the Conservation Commission, who addressed the Jaycees on Dec. 5.

According to Spinale, who teaches at Whitman high school and who is engaged in many environmental projects, the town's water supply comes from shallow-packed wells less than 100 feet deep. Since the water in these wells travels a short distance - from supplies under Duxbury, Pembroke, and Marshfield, it is these sources which must be recharged through the water cycle. If the fresh water cannot be recharged fast enough,

it is possible that it will be replaced by sewage from septic tanks or by ocean water. Spinale pointed out that several towns on the Cape, which are farther away from the ocean than Duxbury, are already experiencing the problem of ocean water seeping into the well water. The problem then is two fold - maintaining an adequate supply of fresh water and keeping the available fresh water from becoming contaminated.

The affects of growth on the water supply are simple. The more homes that are built, the more water that is demanded. The more homes built, the more blacktop required. The more blacktop used, the less opportunity for recharge. The less opportunity for recharge, the greater the chance Duxbury will run out of water or have a contaminated supply.

What effects will the building of a large development, such as that contemplated for North Hill, have on Duxbury's water supply? What is the recharge rate of Duxbury's water? It is questions like these which must be answered before Duxbury can grow in a rational way. Spinale feels the future issuance of building permits must ultimately be based on the available water supply and its recharge rate.

Turning from water to sand, Spinale mentioned the efforts being made to preserve Duxbury beach. Less than 10 percent of the beach which existed 50 years ago still remains. The only way to save what is left is to plant grass on the dunes. The grass will hold the sand. New grass has already been planted and existing grass has been fertilized. More planting and fertilizing of grass is planned. The only way the grass can do its

job of holding the beach is if people do not destroy it. The grass must be protected from trampling, both by humans and by negligent dune buggies.

Spinale mentioned the rationale and procedure used by the Conservation Commission in acquiring land for preservation. Over the years, the commission has acquired a green belt extending diagonally from one corner of Duxbury to the other where the watersheds come

together. Some 1000 acres of land have been purchased to date, half of which are wetlands. The commission seeks land which is unbuildable, and, as a rule, does not obtain land through the use of eminent domain.

Upon the completion of his address, Spinale received the Jaycee Distinguished Service award. By Brian McCormick

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& PLAY LOCALLY